TDS020 EP2077523

FIG. 1

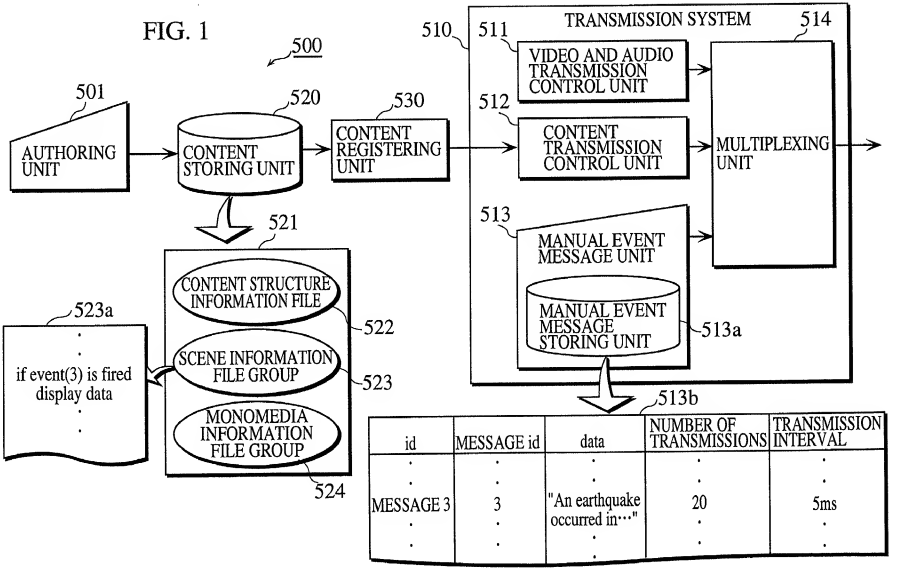

FIG. 2

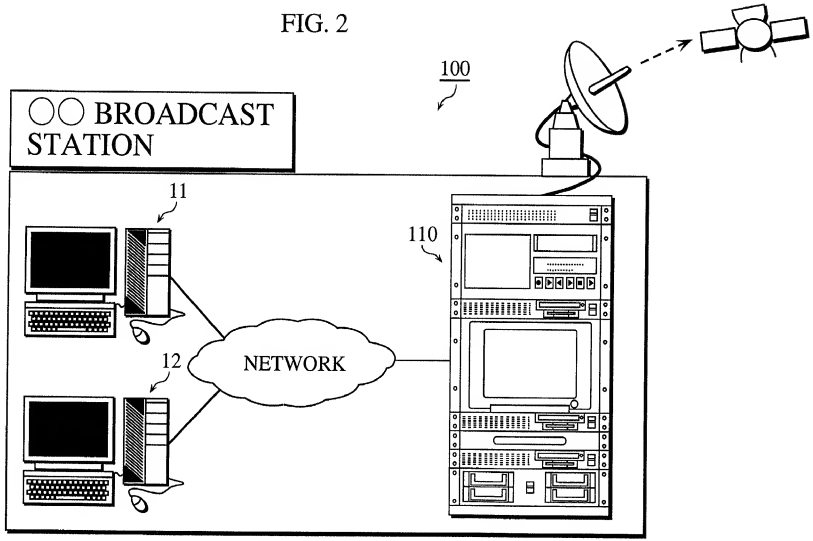

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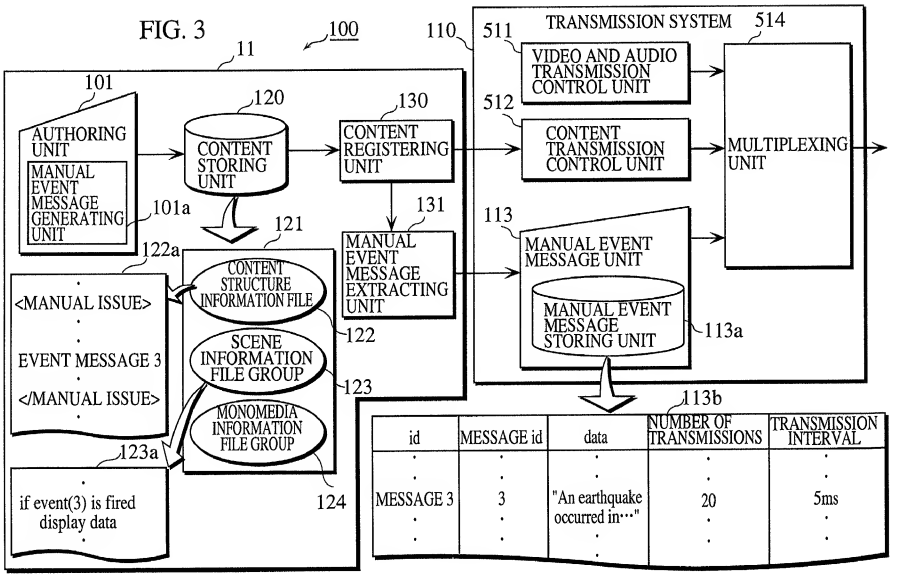
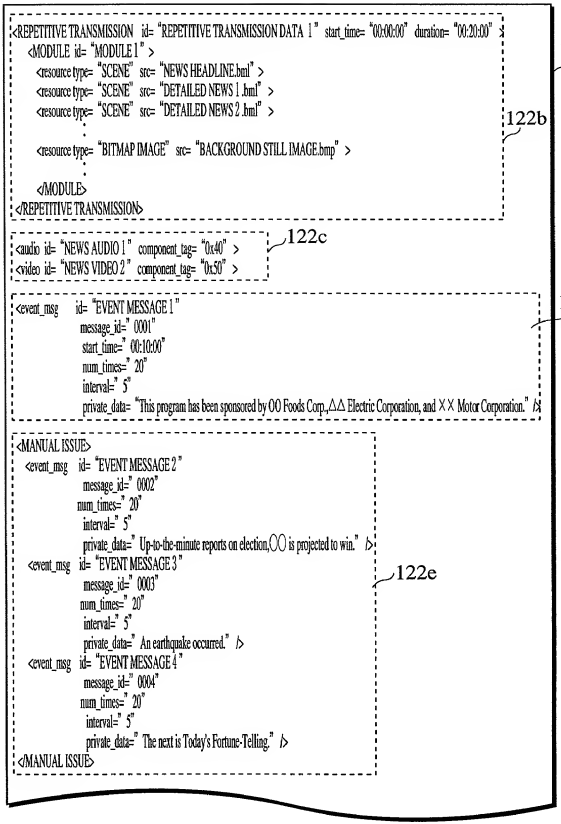
FIG. 3




| id | MESSAGE id | data | NUMBER OF TRANSMISSIONS | TRANSMISSION INTERVAL |
|---|---|---|---|---|
| MESSAGE 3 | 3 | "An earthquake occurred in…" | 20 | 5ms |

FIG. 4


<REPETITIVE TRANSMISSION id="REPETITIVE TRANSMISSION DATA 1" start_time="00:00:00" duration="00:20:00">
<MODULE id="MODULE 1">
<resource type="SCENE" src="NEWS HEADLINE.bml">
<resource type="SCENE" src="DETAILED NEWS 1.bml">
<resource type="SCENE" src="DETAILED NEWS 2.bml">
<resource type="BITMAP IMAGE" src="BACKGROUND STILL IMAGE.bmp">
</MODULE>
</REPETITIVE TRANSMISSION>
122
122b
<audio id="NEWS AUDIO 1" component_tag="0x40">
<video id="NEWS VIDEO 2" component_tag="0x50">
122c
<event_msg id="EVENT MESSAGE 1"
message_id="0001"
start_time="00:10:00"
num_times="20"
interval="5"
private_data="This program has been sponsored by OO Foods Corp.,ΔΔ Electric Corporation, and XX Motor Corporation.">
122d
<MANUAL ISSUE>
<event_msg id="EVENT MESSAGE 2"
message_id="0002"
num_times="20"
interval="5"
private_data="Up-to-the-minute reports on election,○○ is projected to win.">
<event_msg id="EVENT MESSAGE 3"
message_id="0003"
num_times="20"
interval="5"
private_data="An earthquake occurred.">
<event_msg id="EVENT MESSAGE 4"
message_id="0004"
num_times="20"
interval="5"
private_data="The next is Today's Fortune-Telling.">
</MANUAL ISSUE>
122e

TD5020 "E20777/50

FIG. 5

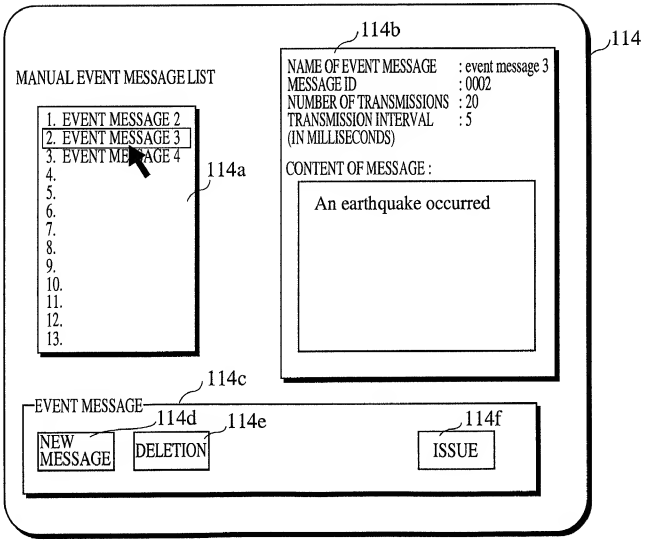
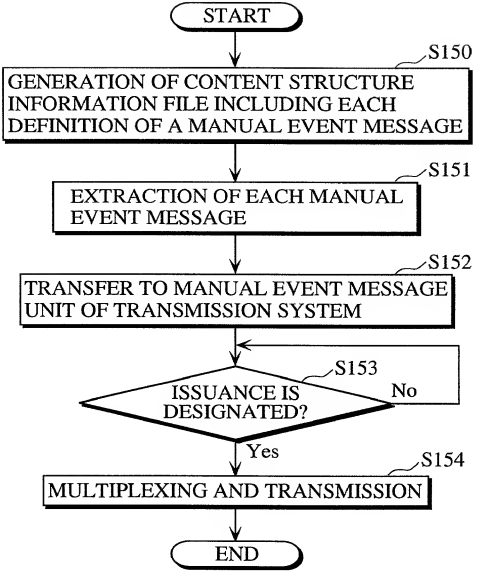


FIG. 6


START
S150
GENERATION OF CONTENT STRUCTURE INFORMATION FILE INCLUDING EACH DEFINITION OF A MANUAL EVENT MESSAGE
S151
EXTRACTION OF EACH MANUAL EVENT MESSAGE
S152
TRANSFER TO MANUAL EVENT MESSAGE UNIT OF TRANSMISSION SYSTEM
S153
ISSUANCE IS DESIGNATED?
No
Yes
S154
MULTIPLEXING AND TRANSMISSION
END

US5020'E20777760

FIG. 7

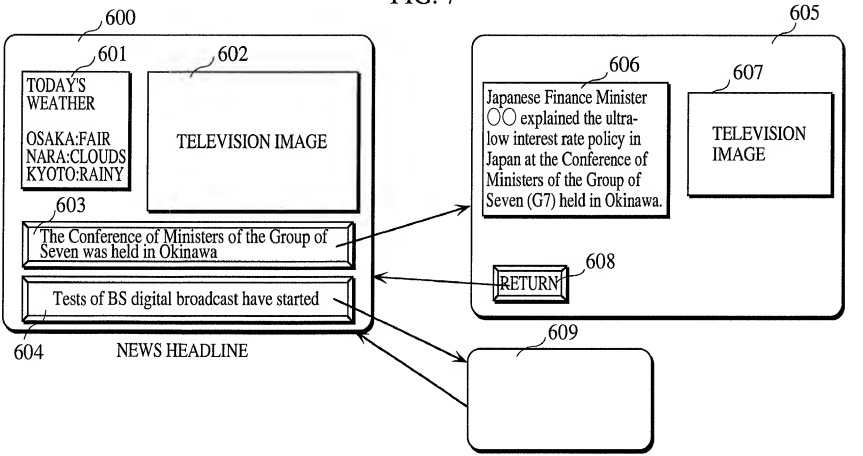


FIG. 8

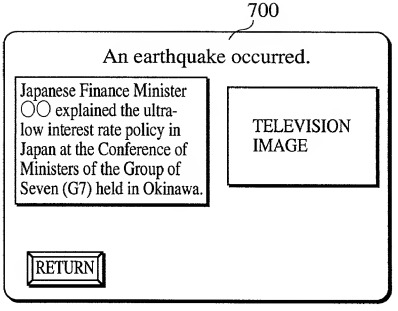

700
An earthquake occurred.
Japanese Finance Minister ○○ explained the ultra-low interest rate policy in Japan at the Conference of Ministers of the Group of Seven (G7) held in Okinawa.
TELEVISION IMAGE
RETURN

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FIG. 9

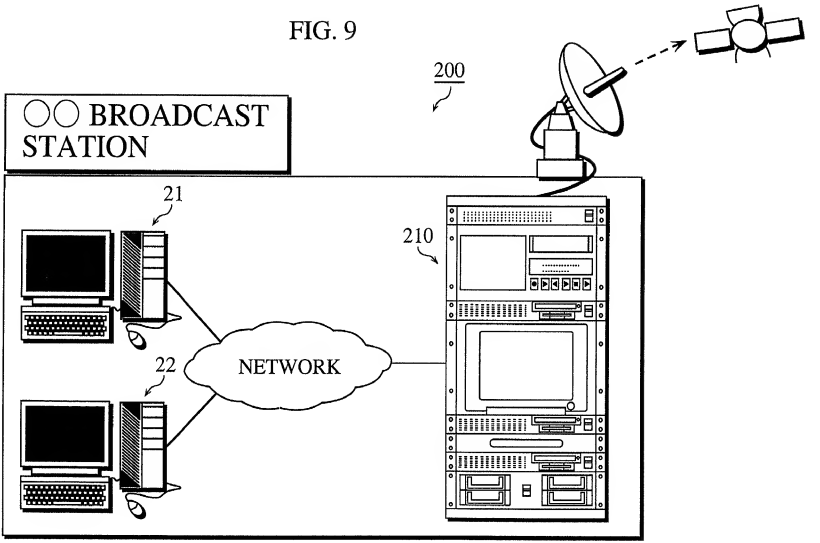


FIG. 10

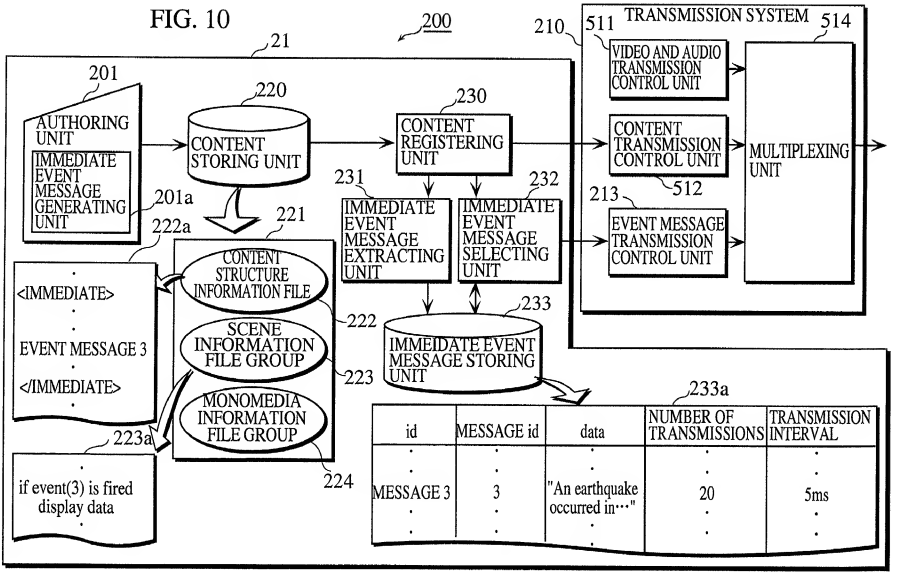

200
21
201
AUTHORING UNIT
IMMEDIATE EVENT MESSAGE GENERATING UNIT
201a
220
CONTENT STORING UNIT
230
CONTENT REGISTERING UNIT
231
IMMEDIATE EVENT MESSAGE EXTRACTING UNIT
232
IMMEDIATE EVENT MESSAGE SELECTING UNIT
233
IMMEIDATE EVENT MESSAGE STORING UNIT
233a
id
MESSAGE id
data
NUMBER OF TRANSMISSIONS
TRANSMISSION INTERVAL
MESSAGE 3
3
"An earthquake occurred in…"
20
5ms
210
TRANSMISSION SYSTEM
511
VIDEO AND AUDIO TRANSMISSION CONTROL UNIT
512
CONTENT TRANSMISSION CONTROL UNIT
213
EVENT MESSAGE TRANSMISSION CONTROL UNIT
514
MULTIPLEXING UNIT
221
222a
CONTENT STRUCTURE INFORMATION FILE
222
SCENE INFORMATION FILE GROUP
223
MONOMEDIA INFORMATION FILE GROUP
224
<IMMEDIATE>
EVENT MESSAGE 3
</IMMEDIATE>
223a
if event(3) is fired display data

FIG. 11

```
<REPETITIVE TRANSMISSION  id= "REPETITIVE TRANSMISSION DATA 1"  start_time= "00:00:00"  duration= "00:20:00" >
    <MODULE  id= "MODULE 1" >
        <resource type= "SCENE"  src= "NEWS HEADLINE.bml" >
        <resource type= "SCENE"  src= "DETAILED NEWS 1.bml" >
        <resource type= "SCENE"  src= "DETAILED NEWS 2.bml" >
            :
        <resource type= "BITMAP IMAGE"  src= "BACKGROUND STILL IMAGE.bmp" >
            :
    </MODULE>
</REPETITIVE TRANSMISSION>

<audio id= "NEWS AUDIO 1"  component_tag= "0x40" >
<video id= "NEWS VIDEO 2"  component_tag= "0x50" >


 <event_msg    id= "EVENT MESSAGE 1"
               message_id= "0001"
               start_time= "00:10:00"
               num_times= "20"
               interval= "5"
               private_data= "This program has been sponsored by Foods Corp.,△△ Electric Corporation, and X X Motor Corporation." />

<IMMEDIATE>
  <event_msg  id= "EVENT MESSAGE 2"
              message_id= "0002"
              num_times= "20"
              interval= "5"
              private_data= "Up-to-the-minute reports on election,○○ is projected to win." />
  <event_msg  id= "EVENT MESSAGE 3"
              message_id= "0003"
              num_times= "20"
              interval= "5"
              private_data= "An earthquake occurred." />
  <event_msg  id= "EVENT MESSAGE 4"
              message_id= "0004"
              num_times= "20"
              interval= "5"
              private_data= "The next Today's Fortune-Telling." />
</IMMEDIATE>
```

222

222b

JP5020:E20677690

FIG. 12

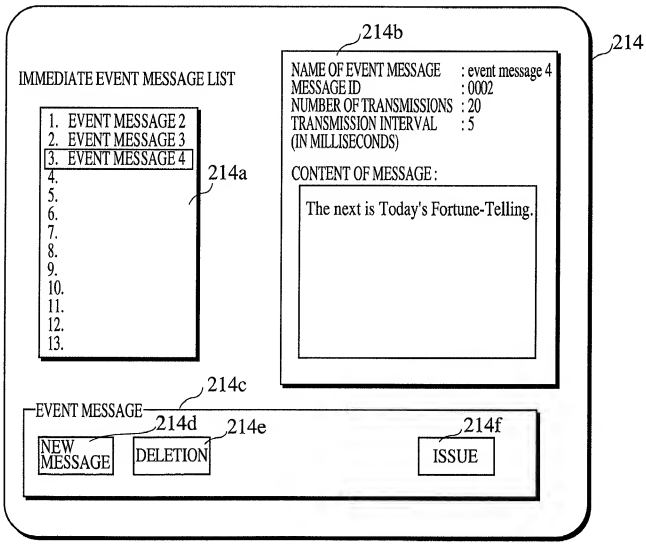


FIG. 13

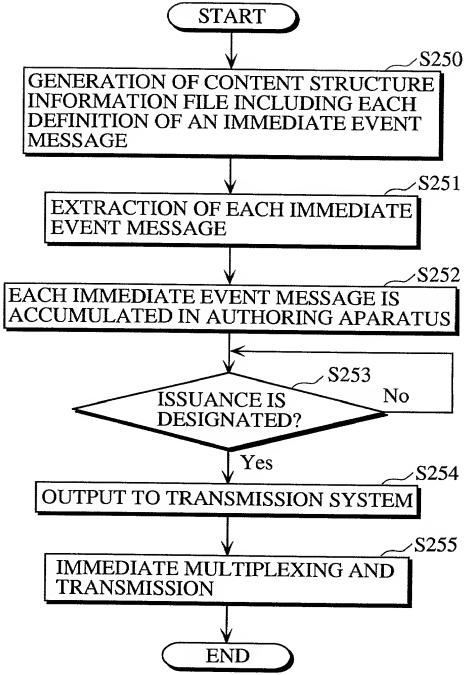
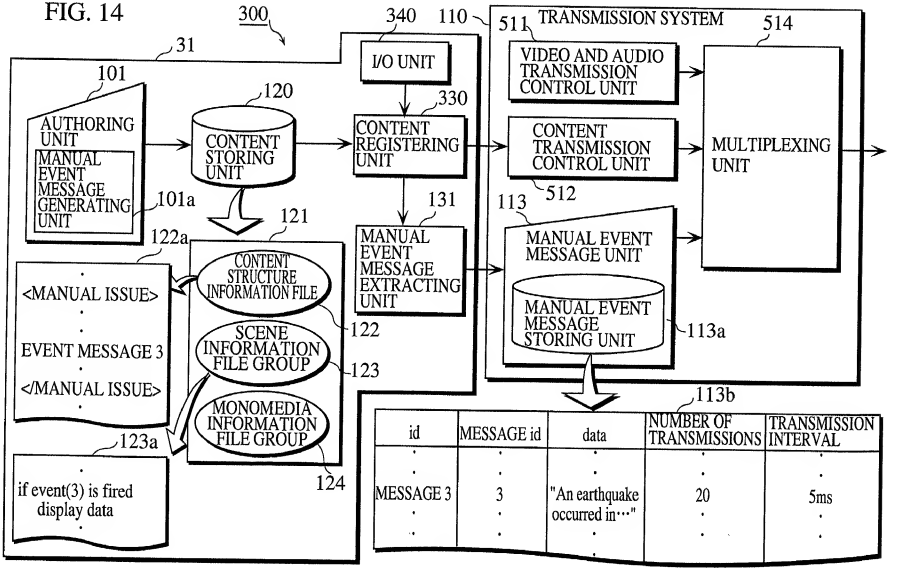
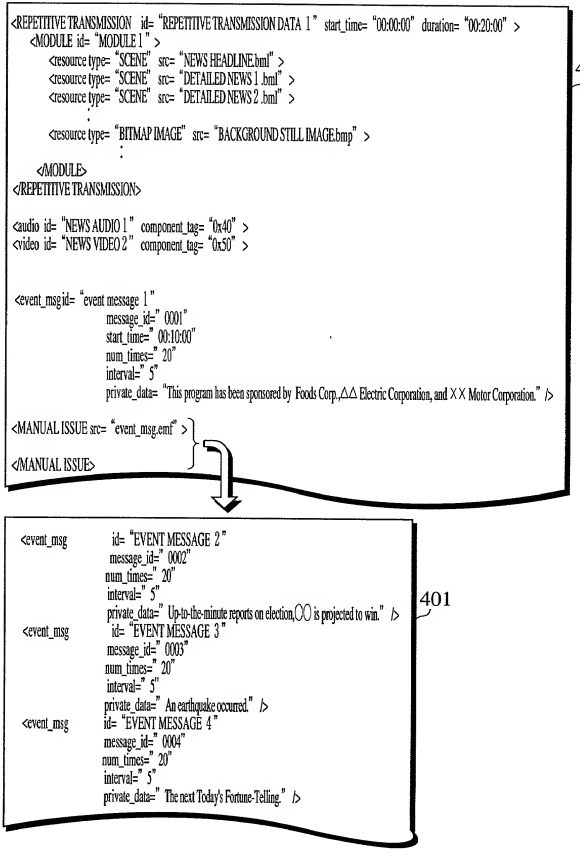

START
S250
GENERATION OF CONTENT STRUCTURE INFORMATION FILE INCLUDING EACH DEFINITION OF AN IMMEDIATE EVENT MESSAGE
S251
EXTRACTION OF EACH IMMEDIATE EVENT MESSAGE
S252
EACH IMMEDIATE EVENT MESSAGE IS ACCUMULATED IN AUTHORING APARATUS
S253
ISSUANCE IS DESIGNATED?
No
Yes
S254
OUTPUT TO TRANSMISSION SYSTEM
S255
IMMEDIATE MULTIPLEXING AND TRANSMISSION
END

FIG. 14




| id | MESSAGE id | data | NUMBER OF TRANSMISSIONS | TRANSMISSION INTERVAL |
|---|---|---|---|---|
| MESSAGE 3 | 3 | "An earthquake occurred in…" | 20 | 5ms |

FIG. 15


<REPETITIVE TRANSMISSION id= "REPETITIVE TRANSMISSION DATA 1" start_time= "00:00:00" duration= "00:20:00" >
<MODULE id= "MODULE 1" >
<resource type= "SCENE" src= "NEWS HEADLINE.bml" >
<resource type= "SCENE" src= "DETAILED NEWS 1.bml" >
<resource type= "SCENE" src= "DETAILED NEWS 2.bml" >
<resource type= "BITMAP IMAGE" src= "BACKGROUND STILL IMAGE.bmp" >
</MODULE>
</REPETITIVE TRANSMISSION>
400
<audio id= "NEWS AUDIO 1" component_tag= "0x40" >
<video id= "NEWS VIDEO 2" component_tag= "0x50" >
<event_msg id= "event message 1"
message_id= "0001"
start_time= "00:10:00"
num_times= "20"
interval= "5"
private_data= "This program has been sponsored by Foods Corp.,△△ Electric Corporation, and XX Motor Corporation." />
<MANUAL ISSUE src= "event_msg.emf" >
</MANUAL ISSUE>
<event_msg id= "EVENT MESSAGE 2"
message_id= "0002"
num_times= "20"
interval= "5"
private_data= "Up-to-the-minute reports on election,○○ is projected to win." />
<event_msg id= "EVENT MESSAGE 3"
message_id= "0003"
num_times= "20"
interval= "5"
private_data= "An earthquake occurred." />
<event_msg id= "EVENT MESSAGE 4"
message_id= "0004"
num_times= "20"
interval= "5"
private_data= "The next Today's Fortune-Telling." />
401